

CLAIMS

What is claimed is:

- 1 1. A catenary anchor leg mooring system for use in the production of oil from subsea
2 reservoirs comprising:
3 a hollow buoy assembly for floating on the sea surface,
4 said hollow floating buoy assembly including a cylindrical hull portion having a center of
5 gravity which is below the sea surface;
6 said shallow draft cylindrical hull portion further including a ballast compartment having
7 a portion below the sea surface;
8 means for providing a path for oil to travel from the subsea reservoirs to a tanker.

- 1 2. The catenary anchor leg mooring system as defined in Claim 1 wherein said
2 ballast compartment is constructed and arranged to be filled with sea water.

3. The catenary anchor leg mooring system as defined in Claim 1 wherein said
ballast compartment is constructed and arranged to increase the inertia of said shallow draft
cylindrical hull portion to reduce the roll and pitch of said cylindrical hull portion in response to
wind and wave forces.

- 1 4. The catenary anchor leg mooring system as defined in Claim 1 wherein said
2 cylindrical hull portion has a diameter which is greater than two times its height.

- 1 5. The catenary anchor leg mooring system as defined in Claim 4 wherein said
2 ballast compartment is substantially cylindrical and follows the circumference of said cylindrical
3 hull portion.